



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2012-1040; Directorate Identifier 2012-NM-029-AD]**

**RIN 2120-AA64**

#### **Airworthiness Directives; BAE SYSTEMS (OPERATIONS) LIMITED Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all BAE SYSTEMS (OPERATIONS) LIMITED Model BAe 146, and Avro 146-RJ series airplanes. This proposed AD was prompted by a report of loss of the end caps on the anti-icing piccolo tube of the wing leading edge. This proposed AD would require a detailed inspection of the end caps on the anti-icing piccolo tube for lost or loose end caps, and replacing or repairing the end caps if necessary. We are proposing this AD to detect and correct lost and loose end caps on the anti-icing piccolo tube, and ice accretion on the wing leading edge or run-back ice, which could lead to a reduction in the stall margin on approach and loss of controllability of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact BAE SYSTEMS (OPERATIONS) LIMITED, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; e-mail [RAPublications@baesystems.com](mailto:RAPublications@baesystems.com); Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES

section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-1040; Directorate Identifier 2012-NM-029-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2012-0003, dated January 6, 2012 (referred to after this as “the MCAI”), to

correct an unsafe condition for the specified products. The MCAI states:

An operator reported the loss of the wing leading edge anti-icing piccolo tube end caps on two aircraft. This was discovered during routine zonal inspections when the wing tips were removed. The loss of the end cap would result in a reduction in anti-icing efficiency, over the outboard portion of the leading edge of that wing, affecting approximately 25% of the wingspan towards the wing tip.

The System Safety Analysis (SSA) classifies the loss of anti-icing of both of the outer wings as hazardous if the loss is not indicated to the crew. The loss of a piccolo tube end cap would not be indicated to the flight crew and, therefore, this reduction in anti-icing capability on one wing must also be classified as hazardous.

This condition, if not detected and corrected, could result in ice accretion on the wing leading edge, or run-back ice and could lead to a reduction in the stall margin on approach together with a reduction in roll control authority.

For the reasons described above, this [EASA] AD requires a one-off [detailed] inspection [for lost and loose end caps] of the piccolo tube end caps. The results of this inspection will be used to establish a suitable repeat inspection period, which will be introduced through the Maintenance Review Board (MRB) process.

The corrective action is replacing or repairing the end caps if necessary. You may obtain further information by examining the MCAI in the AD docket.

#### **Relevant Service Information**

BAE SYSTEMS (OPERATIONS) LIMITED has issued Inspection Service Bulletin ISB. 30-025, dated April 19, 2011. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

#### **FAA's Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of another country, and

is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **Differences Between This AD and the MCAI or Service Information**

Although EASA Airworthiness Directive 2012-0003, dated January 6, 2012, and BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB. 30-025, dated April 19, 2011, specify a reporting requirement, this AD does not require reporting. This difference has been coordinated with EASA.

#### **Costs of Compliance**

Based on the service information, we estimate that this proposed AD would affect about 2 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$340, or \$170 per product.

In addition, we estimate that any necessary follow-on actions would take about 8 work-hours and require parts costing \$140, for a cost of \$820 per product. We have no way of determining the number of products that may need these actions.

#### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

“Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**BAE SYSTEMS (OPERATIONS) LIMITED:** Docket No. FAA-2012-1040;

Directorate Identifier 2012-NM-029-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all BAE SYSTEMS (OPERATIONS) LIMITED Model BAe 146-100A, -200A, and -300A airplanes; and Model Avro 146-RJ70A, 146-RJ85A,

and 146-RJ100A airplanes; certificated in any category; all serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 30, Ice and rain protection.

**(e) Reason**

This AD was prompted by a report of loss of the end caps on the anti-icing piccolo tube of the wing leading edge. We are issuing this AD to detect and correct lost and loose end caps on the anti-icing piccolo tube, and ice accretion on the wing leading edge or run-back ice, which could lead to a reduction in the stall margin on approach and loss of controllability of the airplane.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Inspection**

Within 12 months after the effective date of this AD: Do a detailed inspection of the end caps on the anti-icing piccolo tube for lost and loose end caps, in accordance the Accomplishment Instructions of BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB. 30-025, dated April 19, 2011.

**(h) Corrective Action**

If, during the detailed inspection required by paragraph (g) of this AD, a lost or loose end cap of the anti-icing piccolo tube is found: Before next flight, replace the end cap, in accordance the Accomplishment Instructions of BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB. 30-025, dated



April 19, 2011, or repair in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or the European Aviation Safety Agency (EASA) (or its delegated agent).

**(i) No Reporting Requirement**

EASA Airworthiness Directive 2012-0003, dated January 6, 2012, specifies a reporting requirement; this AD does not require reporting.

**(j) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Information may be e-mailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved.

Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(k) Related Information**

(1) Refer to MCAI EASA Airworthiness Directive 2012-0003, dated January 6, 2012; and BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB. 30-025, dated April 19, 2011; for related information.

(2) For service information identified in this AD, contact BAE SYSTEMS (OPERATIONS) LIMITED, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; e-mail [RAPublications@baesystems.com](mailto:RAPublications@baesystems.com); Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on September 27, 2012.

Ali Bahrami,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-24473 Filed 10/03/2012 at 8:45 am; Publication Date: 10/04/2012]